

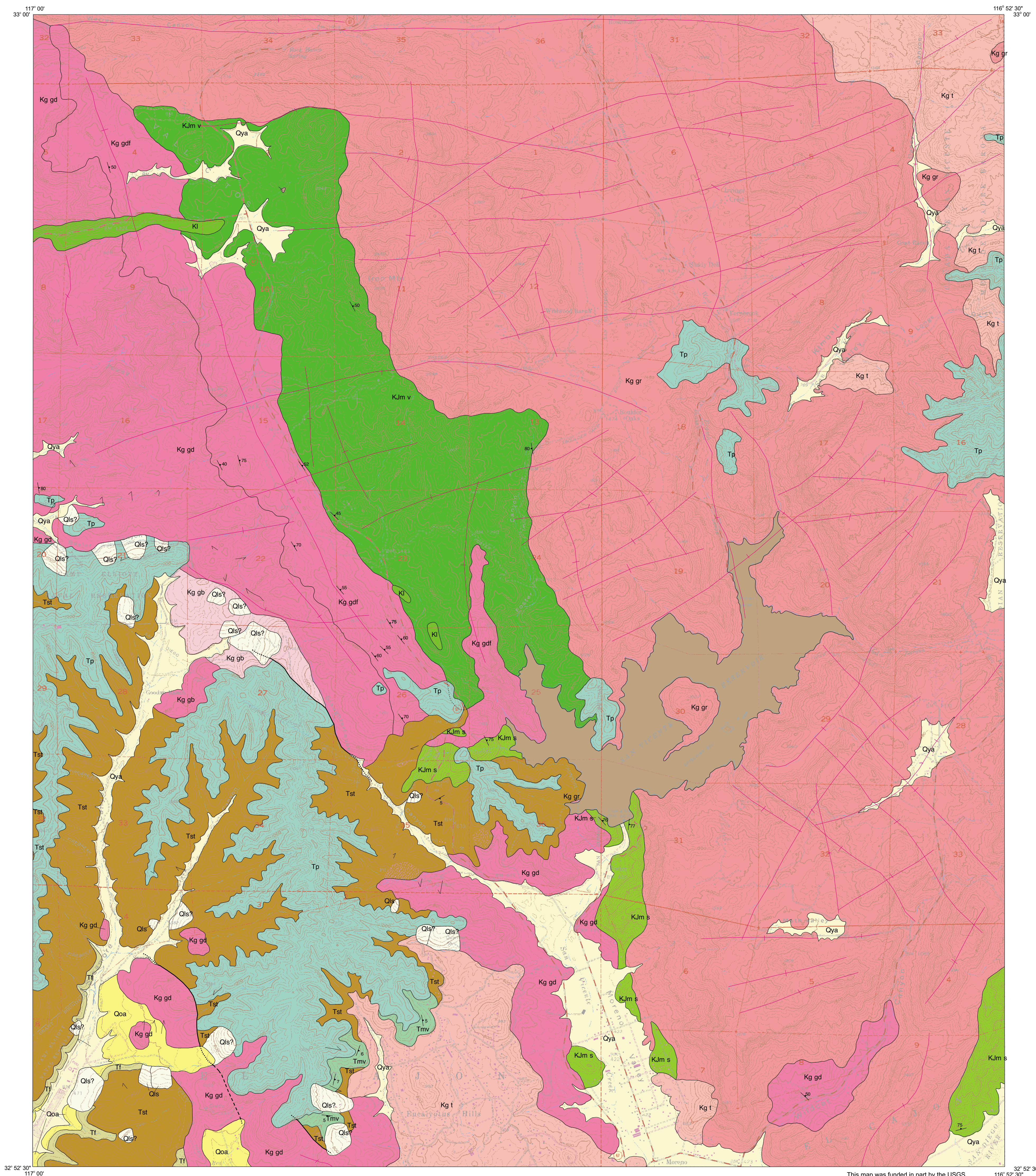


DEPARTMENT OF  
CONSERVATION  
California  
Geological Survey

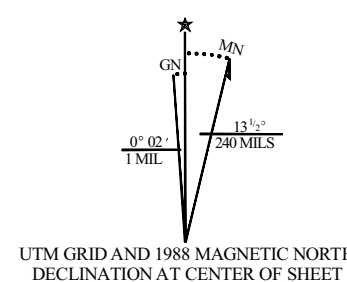
GEOLOGIC MAP OF THE  
SAN VICENTE RESERVOIR 7.5' QUADRANGLE  
SAN DIEGO COUNTY, CALIFORNIA:  
A DIGITAL DATABASE

by  
Siang S. Tan

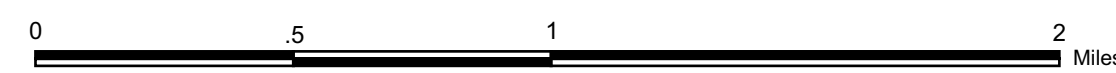
Digital Preparation by  
Kelly Corriea and Sybil Jorgensen  
2002



Topographic base by U.S. Geological Survey  
7.5' San Vicente Quadrangle  
Polyconic projection, contour interval 20 feet,  
dotted lines, 10 feet



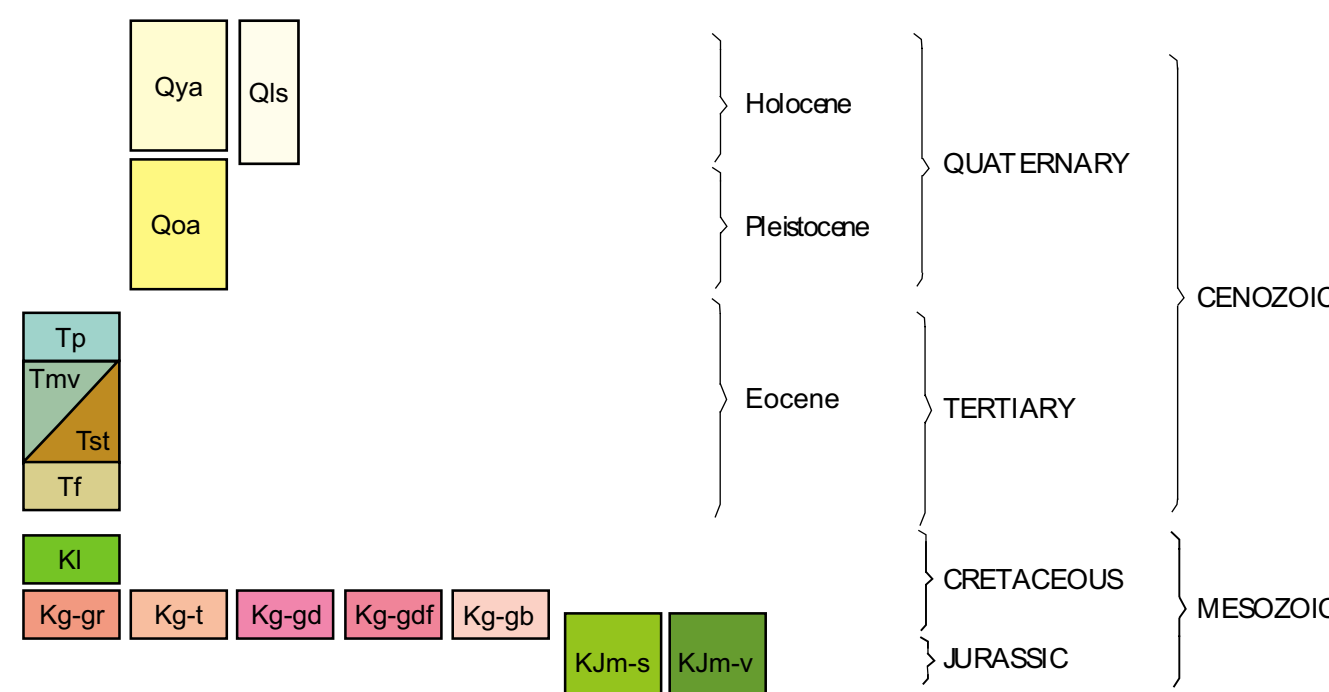
Scale 1:24,000



0 1 2  
Thousand Feet

This map was funded in part by the USA  
National Cooperative Geologic Mapping  
Program, STATEMAP Award no.

### CORRELATION OF MAP UNITS

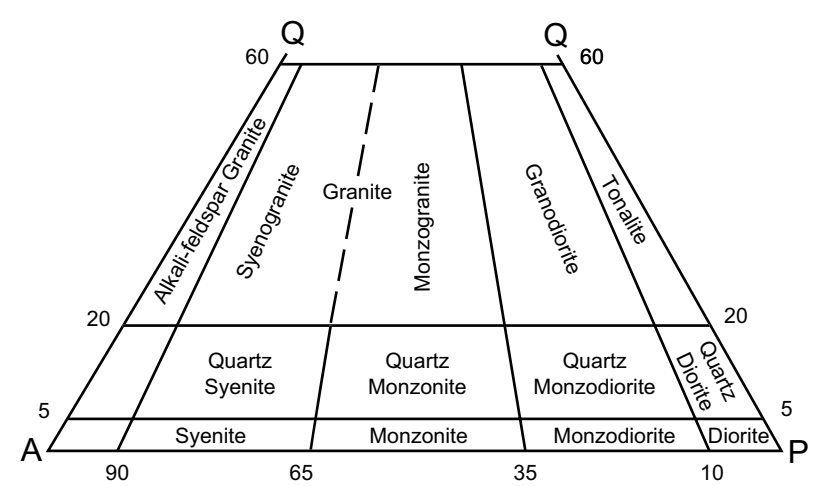


### DESCRIPTION OF MAP UNITS

- |       |  |
|-------|--|
| Qya   | Alluvial deposits (Holocene); unconsolidated to locally poorly consolidated silt, clay, sand and gravel. Includes modern sediments along small drainage channels.  |
| Qls   | Landslide deposits (Holocene and late Pleistocene); landslide slump and rock fall deposits. On map, the deposit is depicted by landslide arrows (see "MAP SYMBOLS").   |
| Qoa   | Alluvial deposits (late to middle Pleistocene); moderately consolidated, poorly sorted flood plain deposits consisting of gravel, sand, silt and clay.   |
| TP    | Pomerado Conglomerate (middle Eocene); poorly to moderately cemented massive to cobbly conglomerate with sandstone interbeds.  |
| Tmv   | Mission Valley Formation (middle Eocene); poorly to moderately indurated, light-colored medium- to fine-grained marine sandstone with cobble conglomerate lenses. Interfingers with underlying Sandstone Conglomerate. |
| Tst   | Stadium Conglomerate (middle Eocene); poorly to moderately cemented massive cobbly conglomerate with sandstone interbeds. Interfingers with overlying Mission Valley Formation.  |
| Tf    | Frans Formation (middle Eocene); poorly indurated non-marine and near-shore marine claystone and sandstone, with lenses of cobble conglomerate. The formation contains many landslides.                                |
| Kl    | Lusardi Formation (Upper Cretaceous); poorly-cemented non-marine boulder conglomerate with sandstone intertaccs.   |
| Kg-gr | Granite (Cretaceous); includes some granodiorite; mostly leucocratic; medium- to coarse-grained.   |
| Kg-t  | Tonalite (Cretaceous); includes some granodiorite and quartz diorite; MEDIUM-BOLDED generally dark colored and severely weathered.   |
| Kg-gf | Granodiorite (Cretaceous); includes some tonalite and monzogranite; medium- to coarse-grained.   |
| Kg-gb | Fine-grained granodiorite (Cretaceous); includes some tonalite; fine- to medium-grained mostly dark colored.   |
| Klm-v | Gabbro (Cretaceous); includes some peridotite, norite, quartz gabbro; medium- grained and dark colored.  |

Metavolcanic rocks (Jurassic and Cretaceous); mildly metamorphosed volcanic, volcaniclastic and sedimentary rocks. Volcanic rocks range from basalt to rhyolite, but are predominantly andesite and dacite. In general, metavolcaniclastic rocks are most abundant. Also includes minor metasedimentary rocks listed under KJm-s.

Metasedimentary rocks (Jurassic and Cretaceous); mildly metamorphosed (greenschist facies) sandstone, siltstone and shale, schist, quartzite, metabasalt, metatuff-breccia with gneiss, fine-grained granodiorite, tonalite, and minor amounts of rocks listed under K.lm-v.

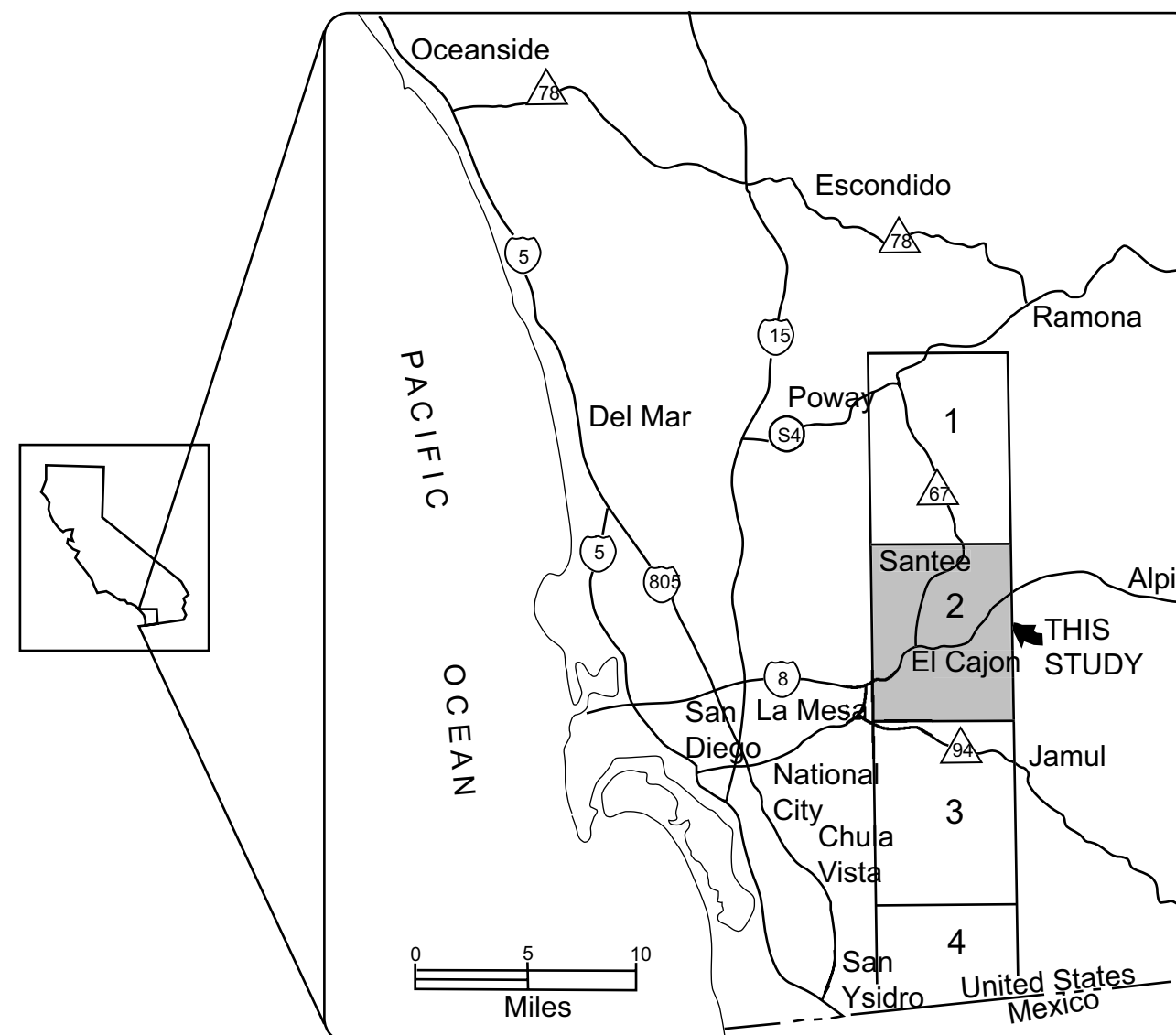


\*Streckeisen, A.L., 1973. Plutonic rocks—Classification and nomenclature recommended by the IUGA Subcommission on Systematics of Igneous Rocks: *Geotimes*, vol. 18, pp. 28-30.

### MAP SYMBOLS

- Contact between map units.
- - - Fault, approximately located, dashed where inferred, dotted where concealed.
- Air photo lineaments that define major joints. No significant evidence of faulting has been observed along these features.
- ↘ Strike and dip of inclined sedimentary beds.
- ↖ Strike and dip of foliation in metamorphic rocks.
- ↗ Landslide (Qls) - arrow/s indicate principal direction of movement, outline indicates headscarp of landslide. Queried where questionable.

## INDEX MAP



1. San Vicente Reservoir quadrangle
2. El Cajon quadrangle
3. Jamul Mountains quadrangle
4. Otay Mesa quadrangle

## REFERENCES

4. Minkin, P.N., 1964. Description of zircons in the granulite porphyry and associated rocks, San Vicente Reservoir quadrangle, San Diego County, California. *California State College, San Diego, Geology Department Research and Research Reports*, 1, 1-10.  
 5. Boyce, R.E., 1964. Origin of the anesitic granulites of the Staughtechnere Canyon area, Lakeside, San Diego County, California. *California State College, San Diego, Geology Department Undergraduate Research Report*, v.8, p. 1 & 9.  
 6. Edkins, S.H., 1980. Mesozoic tectonic evolution of the San Joaquin Hills, San Diego County, California. *Ph.D. Thesis*, California State University, Master of Science Thesis, 67 p.  
 7. Gastil, G. and Bushnell, J., 1961. Geology and geomorphology of eastern San Diego County, California. *California State College, San Diego, Field Trip Report*, 1961, San Diego County, 57th Annual Meeting, San Diego, California, p. 13, geologic map no. 2.  
 8. Kienast, A., 1961. Geology and geomorphology of the San Diego metropolitan area, California. Section B, eastern San Diego metropolitan area. *California Division of Mines and Geology Bulletin* 200, p. 43-56, geologic map no. 2.  
 9. Tass, S.S., 1992. Landslide hazards in the San Vicente Reservoir quadrangle, San Diego County, California. *Division of Mines and Geology, California State College, San Diego, Bulletin*, 200, p. 43-56, geologic map no. 2.  
 10. Todd, V.R., 1983. Geologic map of the El Cajon Mountain quadrangle, San Diego County, California. *California State College, San Diego, Bulletin*, 200, p. 43-56, geologic map no. 2.